

Date: Tue, 1 Jun 93 13:39:07 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #666
To: Info-Hams

Info-Hams Digest Tue, 1 Jun 93 Volume 93 : Issue 666

Today's Topics:

 Collins tool
 Daily Solar Geophysical Data Broadcast for 30 May
 G5RV Antenna(s)
 HP 48SX
 IC 271/471 vs IC 275/475 Performance Question
 Intermod/spurious sigs a common HT problem?
 J.C. Whitney 2M HT
 Morse Code for the Mac
 Nickel-hydride batteries (UPDATE)
 Proposed Minnesota scanner law - update
 Review of QRZ! CD-ROM
 Two-fer troubles
 Yellow Sheets mail fraud -- contact FBI!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 1 Jun 1993 19:10:19 GMT
From: sdd.hp.com!col.hp.com!news.dtc.hp.com!srngenprp!alanb@network.UCSD.EDU
Subject: Collins tool
To: info-hams@ucsd.edu

stark (mswmod@nimbus.sage.unr.edu) wrote:

: The old 75A sieres used a lot of Bristol Spline fastners. They
: look like allen but with extra groves.

: Xxelite makes them. I get them from many mail order co's. Jensen etc.

: This may be what you have. Allen wrenches will go in but slip just
: before you get enough pressure on it to move!!

Will Torx wrenches work in spline fasteners? They do look alike.

AL N1AL

Date: 1 Jun 93 19:42:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 30 May
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 150, 05/30/93
10.7 FLUX=140 90-AVG=121 SSN=130 BKI=2211 1001 BAI=003
BGND-XRAY=B4.1 FLU1=2.9E+05 FLU10=1.2E+04 PKI=2212 2222 PAI=006
BOU-DEV=010,018,008,006,006,002,001,008 DEV-AVG=007 NT SWF=01:005
XRAY-MAX= M1.0 @ 0533UT XRAY-MIN= B3.3 @ 0045UT XRAY-AVG= B9.7
NEUTN-MAX= +000% @ 0000UT NEUTN-MIN= +000% @ 0000UT NEUTN-AVG= +0.0%
PCA-MAX= +0.0DB @ 0000UT PCA-MIN= +0.0DB @ 0000UT PCA-AVG= +0.0DB
BOUTF-MAX=55369NT @ 1324UT BOUTF-MIN=55324NT @ 1747UT BOUTF-AVG=55356NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:-000NT@ 0000UT G7-AVG=+074,+000,+000
GOES6-MAX=P:+115NT@ 1719UT GOES6-MIN=N:-073NT@ 0039UT G6-AVG=+097,-017,-048
FLUXFCST=STD:140,140,140;SESC:140,140,140 BAI/PAI-FCST=005,010,010/010,010,010
KFCST=1113 3111 2214 4112 27DAY-AP=010,006 27DAY-KP=2134 3311 2121 2211
WARNINGS=*SWF
ALERTS=**MINFLR:M1.0@0533UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 29 MAY 93 was 70.0.
The Full Kp Indices for 29 MAY 93 are: 4o 3- 2+ 4- 1+ 2o 2+ 3-

Date: 1 Jun 93 21:29:01 GMT
From: news-mail-gateway@ucsd.edu
Subject: G5RV Antenna(s)
To: info-hams@ucsd.edu

>My idea of a G5RV antenna is THE antenna invented by G5RV himself!
>Nothing else. When I hear someone referring to a G5RV, I assume that
>this is the precise antenna he is talking about. Methinks I assume
>too much. 73 de K9CUN, Jack

Jack, the mischief is that G5RV, himself, invented THE antenna and then

proceeded to invent variations of the antenna. He has discussed different impedences and/or lengths of feed lines, baluns or not, coax or not, antenna tuners or not,... I have implemented G5RV's latest suggestions of using an antenna tuner with no balun and no coax. The dbi gain in each of the FOUR nodes of the G5RV is equal to the dbi gain in each of the TWO nodes of a dipole on 17 meters.

The reason that some Hams get better results from a dipole is that there is almost NO (NONE, ZILCH) broadside radiation from the 102' G5RV antenna on 17 meters, for instance. Each of its four nodes is just as strong as each of the dipole's two nodes, but North/South plus/minus 50 degrees for a North/South antenna. In my opinion, it can't be beat for \$25 cost.

73...Cecil...KG7BK

Date: 1 Jun 93 15:34:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: HP 48SX
To: info-hams@ucsd.edu

> it can remote any ham infrared device), may be supporting the "cloning"
> feature of some radios thru the mic/sp from serial port, which you can
> edit and download back (known to work on computers, should work on 48 but
> not tested), a 1750Hz tone burst generator ?.

Could you elaborate on cloning functions that are known to work on computers for programming handhelds ?

Bryant, N5GWF
WFAUST@NOMVS.LSUMC.EDU

Date: Tue, 1 Jun 1993 16:41:13 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
europa.eng.gtefsd.com!emory!rsiatl!ke4zv!gary@network.UCSD.EDU
Subject: IC 271/471 vs IC 275/475 Performance Question
To: info-hams@ucsd.edu

In article <C7wDqF.Azu@freenet.carleton.ca> ae517@Freenet.carleton.ca (Russ Renaud) writes:

>
>Ok Gary, tnx for the response, very thought-provoking! If you
>can find the address for the Mutek board supplier, it would be
>very much appreciated.

Iain was kind enough to send me this address by Email

muTek limited
PO Box 24
Long Eaton
Nottingham
NG10 4NQ
Tel: +44 602 729467

>I would think, at first glance anyway, that replacing the mixer
>would be a good idea. However, I would be loathe to replace
>PIN diodes with a mechanical relay, IF it meant slower TR switch-
>ing times. I believe that 9600 baud packet will be coming to
>the Ottawa area soon, and I'd hate to slow the rig's
>TR switching. Perhaps a simple replacement of the existing PIN
>diodes with newer, less lossy components would work. One could
>have his cake and eat it too! :-)
>
>I have never seen a review published on either the 211/251 rigs,
>what would the TR switching time be?

The relay they use is a fast sealed type. I don't know the exact
switching time, but subjectively I'd say the relay is **faster**.

>What is the active device used on the Mutek mixer?

It's a Mini Circuits double balanced mixer, a sort of diode ring jobbie
with a high third order intercept.

Gary

```
--  
Gary Coffman KE4ZV          | You make it,      | gatech!wa4mei!ke4zv!gary  
Destructive Testing Systems | we break it.     | uunet!rsiatl!ke4zv!gary  
534 Shannon Way           | Guaranteed!      | emory!kd4nc!ke4zv!gary  
Lawrenceville, GA 30244   |                  |
```

Date: 1 Jun 93 18:20:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: Intermod/spurious sigs a common HT problem?
To: info-hams@ucsd.edu

bodoh@dgg.cr.usgs.gov writes
"The first manufacturer who squeezes in a few more features

such as 100 channels in 10 banks of 10, triple conversion and a scan rate of at least 20 ch/sec will have a 'best seller' on their hands. The intermod should be greatly reduced by triple conversion. I suppose that these features will take a little more space but it would be well worth it for many."

There seems to be a misunderstanding here. Intermod may come from a couple of sources. External generated intermod (most often at the repeater/remote site) and internal intermod generated in the receiver FRONT END ahead of the IF stages. The only things that will help here is bullet proof front rf-mixer stages (and lots of battery drain), narrow band width filters at the antenna input or reduced sensitivity. Front end filters will help with out-of-band intermod but not in in-band-intermod. The point here is no matter how good the IF filtering is it won't help the intermod. The damage is already done up front.

Pete McAfee KD6HR

Date: 1 Jun 93 11:31:23 CST
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!engr.uark.edu!news.ualr.edu!eivax.ualr.edu!mauldin@network.UCSD.EDU
Subject: J.C. Whitney 2M HT
To: info-hams@ucsd.edu

In article <1993Jun01.113725.3989@n8emr.cmhnet.org>,
gws@n8emr.cmhnet.org (Gary Sanders) writes:
> In article <C7Myv9.6Av@fc.hp.com> rogerm@fc.hp.com (Roger Mitchell) writes:
>>
>>I just saw an ad in the latest J.C. Whitney catalog for a 2 meter HT with
[...]
>
> I dont remember seeing any mention in the ads in QST,73 or CQ that
> a ham radio license is required. AEA and universal AR catalogs
> dont mention this either. How about ads for ford,chevy, honda. They
> dont mention the fact that you need a drivers license to make use of
> their product.

Beautiful logic. QST, 73, CQ are targeted at ham radio operators, who know the license requirements. The ads for Ford, Chevy, Honda are targeted at automobile drivers, who know the license requirements. (For that matter, my four-year-old son knows that!)

The J. C. Whitney catalog is targeted at cool cats who like to hang aftermarket gizmos on their cars. The chances are that at least some of them would assume that because it is marketed through that channel, it must be OK for them to buy and use. Practically every non-technically-oriented person I've dealt with believes that ham radio in general and two meters in particular is merely a high-end Citizens' Band

and is open to anyone who can afford the equipment.

The issue is not about expecting equipment vendors to bear full responsibility for curbing unlicensed activity, but rather about not setting bear-traps for unwitting consumers. As long as the sellers can move the merchandise, they don't care if some ill-informed buyer gets hit with a fine or prison term. That's why there ought to be a law that requires them to inform the buyers of esoteric gizmos like ham rigs that there is indeed a Federally-mandated (yea, international-treaty-mandated) licensure requirement for both station and operator. This would at least help keep the honest people honest. Some vendors, notably Radio Shack, do this voluntarily (mostly as a CYA gesture, I suspect) but the chances are that J. C. Whitney doesn't care ("What the hell, we're already in Chapter 11 anyway!")

73,
Doug K5DH

Date: 1 Jun 93 11:50:15
From: usc!howland.reston.ans.net!sol.ctr.columbia.edu!hamblin.math.byu.edu!
hamblin.math.byu.edu!emery@network.UCSD.EDU
Subject: Morse Code for the Mac
To: info-hams@ucsd.edu

I am looking for a Morse Code trainer for the Macintosh. All the ones I have seen so far do not work with System 7. If anyone out there knows where I can find one, please let me know by either posting here or by e-mail.

Emery (KB7TER)

Date: Tue, 1 Jun 1993 16:58:30 GMT
From: swrinde!gatech!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!bgsuvax!att!cbnews!wrb@network.UCSD.EDU
Subject: Nickel-hydride batteries (UPDATE)
To: info-hams@ucsd.edu

RPH0470@tntech.EDU (Richard Hosker) writes:

>
>The question was raised about auto-shutoff fast chargers. Harding
>recommends two possible charger types, the design of which is left as an
>exercise for the student. ;-) The first is a temperature-controlled device,
>switching off at either a constant temperature of 35-45 degrees C or a
>change in temperature of 10 degrees C. (This is a good place to note that
>the NiMH's we're using at work seem to get no hotter than nicads on a ~150

>mA charge. We use a Rat Shack fast charger, which runs for 5 hours and
>shuts down; we just run the NiMH's through it twice.) The other approach is
>by voltage control; Harding gives no specifics on this in their literature,
>but they will apparently explain it to those truly interested.
>

Maxim makes a couple of chips, the MAX712/713, that should make a charger
as described above pretty easy. I don't remember which is which, but one
goes from fast- to trickle-charge due to temp changes and the other due to
voltage. Actually, I think they monitor the rate of change of these
properties.

I've got some tech notes around here somewhere, if anyone is interested
e-mail me. They describe chargers for both NiCD and NiMH celss (from 1 to
16 cells at a time).

```
+=====+      Happy user of OS/2 2.0!  
| Wally Blackburn      |      Ask me about it!  
| wrb@ccsitn.att.com    |  
| AT&T NSD              |  
| Amateur Radio Station AA8DX    |      Clinton-Gore - Socialist Leadership  
| 614-575-6604          |      for the 90's!  
+=====+
```

Date: Tue, 1 Jun 1993 17:42:23 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!rsg1.er.usgs.gov!
resdgs1.er.usgs.gov!tbodoh@network.UCSD.EDU
Subject: Proposed Minnesota scanner law - update
To: info-hams@ucsd.edu

--
I was the one who posted the information regarding a proposed ammendment to
the Minnesota scanner law which would remove the exemption for amateur
operators. I was just contacted by the ARRL and told that the ARRL and
the author of the bill have worked things out. Apparently the author has
talked to the author of the original scanner legislation and after that
he pulled the bill.

Please do not contact the author of the bill, Mike Delmont as he is
cooperating. Apparently this was resolved about two months ago but the
lead time in publishing the June issue of Monitoring Times along with my
own outrage led to my posting. Sorry...

BTW - I am impressed with the way the ARRL looked out for the amateur
community in this matter.

```
+++++
+ Tom Bodoh - Sr. systems software engineer
+
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198      (605) 594-6830      +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)
+
+ "Welcome back my friends to the show that never ends!" EL&P
+
+++++
```

Date: Tue, 1 Jun 1993 16:23:24 -0400
From: pa.dec.com!zk3.dec.com!cranston@decwrl.dec.com
Subject: Review of QRZ! CD-ROM
To: info-hams@ucsd.edu

Review of QRZ! Ham Radio CD-ROM

Fred Lloyd, AA7BQ, and a cast of contributing others has producted a CD-ROM with 500+ Mb of amateur radio related data, information and software. For those that missed the orignal announcements here's a summary of whats on the disk:

- * ISO 9660 CD-ROM Format - readable on all systems
- * March 1993 US CALLSIGN DATABASE (in ASCII)
- * PC (MSDOS) compatible search and retrieval software
Search by callsign, name, city, zipcode, several
output formats including screen, mailing lists, etc.
- * Hundreds of popular ham related (shareware) programs
- * Nearly 200 radio and scanner modifications
- * USENET news articles from rec.ham-radio and
rec.radio.amateur.{misc,packet,policy} since 1989
- * Complete dumps of several internet ham radio archives
- * Canadian and US CLUB callsigns (no search/retreival software)
- * FCC Rules and Regulations (Part 97)
- * DX lists, DXCC info, BBS Lists
- * UNIX callsign database/server 'C' source code
- * SIMTEL20 Ham Radio Archive Files
- * Vast amounts of useful reading information for the radio amateur

The QRZ callsign search and retrieval software is very good. The performance of looking up a single callsign is simply 'how fast can you get your finger off the return key'!

The other lookup modes 'effectively' search the entire database, all 597,071 amateurs. For each search criteria (callsign, name city, zipcode) there is a corresponding database and index file optimized for a given search criteria. The performance here is nothing short of amazing. For example, on my 40MHz 386 PC a search for all the amateurs with the last name of 'Cranston' takes about 15 seconds!

All of the callsign functionality can run directly from the CD-ROM, you need NO hard disk space for this. However, if you need the ultimate in performance and you have more hard disk space than you know what to do with, you can copy all 200Mb or so of the QRZ files off of the CD-ROM onto your hard disk!

The Usenet news article archives contain a wealth of information and entertainment (you can re-live the No Code wars).

The information supplied by Devon Bowen, KA2NRC from buffalo.edu (\BUFFALO) is an excellent reference to various aspects of amateur radio. From the amateur radio Frequently Asked Questions (FAQ) notes (FAQ_HAM.1, FAQ_HAM.2, FAQ_HAM.3) to WEFAX (WEFAX.TXT). These files contain good solid, yet basic, information and pointers to sources of more info and parts, kits and equipment. Also include here are the Canadian and US CLUB callsign lists (CANADIAN., CLUBCALL...)... no search/retrieval software is provided for these. The US CLUB callsign file appears to be the same format as the UNIX flavor of the QRZ database (see stuff in \UNIX). The Canadian callsign file is a different, but similar format.

The amateur radio and scanner modifications (\MODS) probably covers all the known to man kind mods that you can make. Alinco, Icom, Kenwood, Uniden, Yaesu HF, VHF, handheld radios; Radio Shack and Uniden base and handheld scanners.

Software... there is tons of freeware and shareware amateur radio related software on the CD-ROM. Most of it is for MS-DOS (some Windows). There is some Macintosh and Amiga software (KA9Q TCP/IP). The software ranges from logging programs, packet terminal programs, the NEC antenna modeling software, FAX, SSTV, RTTY, CW learning, propagation, satellite tracking, too many to list here, Believe me, its more than likely there if you want it!

The QST/QEX bibliographies and indices are very nice references that you can search (use the DOS find command, or get the Unix tools from MIX Software, Inc for \$20 and use grep and others).

The only product to compare this CD-ROM to is the Buckmaster HamCall CD-ROM. HamCall costs twice that of QRZ! (\$50). HamCall by now should have released an update that is from the March FCC callsign records. The HamCall CD-ROM also contains tons of software, a lot of it being non amateur radio

related. HamCall has little to none of the other data and info available on QRZ! (such as, bibliographies, Modifications, Usenet newsgroup archives, etc). The HamCall callsign database is also NOT in plain ascii text and its slower than that of QRZ. The HamCALL CD-ROM is update qualterly (I could be wrong about this?), but you pay the full price to get it.

It is not known at this time when any updates to QRZ! will be made. In the 00READ.ME file Fred Lloyd indicates that there will be a next edition.

If you want more info about this CD-ROM, you can anonymous ftp the readme and index from cdrom.com:/pub/cdroms/ham.

In a nutshell, the QRZ! CD-ROM is a gold mine of amateur radio stuff, at a price that can't be beat!

The QRZ! CD-ROM is available from a couple of sources:

Walnut Creek CDRom
1547 Palos Verdes Mall, Suite 260
Walnut Creek, CA 94596

1 800 786-9907
1 510 674-0821 FAX
orders@cdrom.com

Price: \$25 plus 5\$ S&H is \$5 for US/Canada/Mexico, \$10 for overseas.

(This one was recently posted to the news group, I assume the pricing is valid)

Media Innovations
5405 Alton Parkway, Suite 504
Irvine, CA 92714
714-831-1121

Price: \$15 each plus \$4.50 S&H

Here's a look at the directory tree of the QRZ! CD-ROM:

| | |
|----------------|---|
| + qrz.exe | The MS-DOS callbook program. Run it. |
| + cdf.exe | The MS-DOS CD-FIND program - locates file names |
| + unzip.exe | This program will unzip .ZIP files |
| + tree.txt | QRZ! directory tree |
| + 00_index.txt | A listing of all the files on the disc. |

| | |
|--------------|---|
| +---BUFFALO | Descriptions/info on all facets of amateur radio |
| \---ARRL_BIB | Huge index of past QST and QEX articles |
| +---CALLBK | Database/index files for MS-DOS QRZ callsign program |
| +---MISC | |
| +---AA7BQ | Files from the AA7BQ BBS system |
| +---AMSAT | Satellite tracking software |
| +---DL_FILE | Contributions from Thomas Planke, DL5ATP |
| \---QSLROUTE | 1993 World Annual of QSL Managers |
| +---FCC | Part 97 FCC rules |
| \---TELCOM | Info telephones, phone patches, telephone interference |
| +---MODS | 200+ amateur radio and scanner modifications |
| +---SIMTEL | A collection of ham radio data from SIMTEL20 |
| +---HAMRADIO | PC (MS-DOS) amateur radio programs |
| +---KA9Q | KA9Q TCP/IP for MS-DOS and related info |
| +---PACKET | Packet (AX.25) related MS-DOS programs and info |
| +---WORLDMAP | World maps for the SWIVEL viewing utility (included) |
| +---XASM | Cross assemblers for Motorola and Intel, runs on MS-DOS |
| +---ZIP | ZIP archive utilities |
| \---ZOO | ZOO archive utilities |
| +---UCSD | The UCSD hamradio archives |
| +---TCPIP | TCP/IP software and utilites for various PC's |
| +---AMIGA | |
| +---AX25 | |
| \---SRC | |
| +---BM | |
| +---CRYPTO | |
| \---MD5 | |
| +---DOCS | |
| +---G0BSX | |
| +---G1EMM | |
| +---GPSNOS | |
| +---GRACILIS | |
| +---GTEPMS | |
| +---HRLNOS | |
| +---INCOMING | |
| +---IW0CNB | |
| +---K5JB | |
| +---KA9Q | |
| \---NOTES | |
| +---KIT | |
| +---LTALK | |
| +---MAC | |
| +---MISC | |
| +---MSWIN | |
| +---NANSI | |
| +---NET | |
| +---NOSVIEW | |
| +---OLD | |

| | | | | |
|--|--|--|-------------|--|
| | | | ----NET | |
| | | | ---NOS | |
| | | | ----OS2 | |
| | | | ----OS9 | |
| | | | ----PA0GRI | |
| | | | ----PA2AGA | |
| | | | ----PE1CHL | |
| | | | ----PI | |
| | | | ----PNEWS | |
| | | | ----SUN | |
| | | | ----SYS5 | |
| | | | ----UTIL | |
| | | | ----WAMPES | |
| | | | ----BBS | |
| | | | ----CONVERS | |
| | | | ----SRC | |
| | | | ---LINXNCLD | |
| | | | ---NETINET | |
| | | | ---UTIL | |
| | | | ----WG7J | |
| | | | ---WNOS | |
| | | | ----ARRL | QST bibliographies, ARRL info |
| | | | ----DSP | Digital Signal Processing info & software |
| | | | ----MISC | MS-DOS software (cw, logging. satellite) |
| | | | ----MORSE | The VU2ZAP CW training program for MS-DOS |
| | | | ----NEC | The NEC-2 program and sources |
| | | | ---CSOURCE | |
| | | | ----PACKET | Packet radio relatred programs and info |
| | | | ----AA4RE | Packet BBS |
| | | | ----ARRLCNC | ARRL Computer Networking Conferences |
| | | | ----BAYCOM | Baycom V1.5 software and manual |
| | | | ----DL | |
| | | | ----DSP | |
| | | | ----F6FBB | |
| | | | ----G8BPQ | |
| | | | ----GW | Maps of Internet/AMPRNet gateway locations |
| | | | ----KISS | KISS TNC for the TNC-2 and clones, assembler |
| | | | ----LANLINK | |
| | | | ----MISC | |
| | | | ----MSYS | |
| | | | ----PCELM | |
| | | | ----PK232 | |
| | | | ----ROSE | |
| | | | ----THEBOX | |
| | | | ----THENET | |
| | | | ----TST | |
| | | | ----W0RLI | |
| | | | ----WA7MBL | |

| | | | |
|---|-----|------------|--|
| | | \---WA8DED | |
| | + | ---RACES | RACES' bulletins and info |
| | + | ---RTTY | HAMCOM V2.0 program |
| | + | ---SAT | Satellite tracking software |
| | \ | ---UOSAT | UOSAT pictures, GIF format |
| + | --- | UNIX | US Callsign Database (UNIX Version) |
| \ | --- | DIGESTS | Usenet Ham Radio News articles 1989-1993 |
| | + | ---DSP | |
| | + | ---INFOHAM | |
| | + | ---PACKET | |
| | + | ---POLICY | |
| | \ | ---TCP | |

I have no financial or business association of any kind with Fred Lloyd, Walnut Creek CDRom, Media Innovations, Buckmaster or anyone or anything related to or with them. I am just a VERY happy owner of the QRZ! CD-ROM!

Scott Cranston,
KB1NW,
cranston@zk3.dec.com

Date: Tue, 1 Jun 1993 17:10:39 GMT
From: mnemosyne.cs.du.edu!mercury.cair.du.edu!awinterb@uunet.uu.net
Subject: Two-fer troubles
To: info-hams@ucsd.edu

I am experimenting with the latest evolution of the Two-fer, 2.5 watt transmitter, as described in the April issue of 73 mag but am unable to achieve the 2+ watts, getting instead less than 1/2 watt. I'm trying to use the full circuit (including the QSK piece) and am keying the oscillator on/off (not using the continuous osc. option). All of this is being done on the FAR circuit board.

Some significant variations I've done are:

- * For the RFC off of the PA collector (to + voltage), used an FT50-61 toroid with 19 turns rather than the depicted FT37-61 with 21 turns.
- * Used an NTE236 transistor for the PA instead of the MRF476. *
- Substituted a 10 ohm resistor for the 33 ohm resistor off of the emitter of driver (a 2N3866) to increase driver output.

After building a variation of the output filter for 30 meters and

obtaining very low output power before and after the filter (on the order of < 1/2 watt), substituted the filter depicted in the schematic for 20 meters. However, power output was the same.

Decided to experiment with the matching transformer between the driver and the PA (T37-2 with 26 turn primary and 3 turn secondary). I used #28 wire for the primary and #26 wire for the secondary windings to make it easier to tell them apart. Here's what happened:

| # secondary turns | current used by circuit | output power |
|-------------------|-------------------------|--------------|
| 3 | 250 ma | < 1/2 w |
| 4 | 350 ma | < 1/2 w |
| 7-12 | 450-500 | < 1/2 w |

The only significant change was the increase in current used by the transmitter. The 2N3866 driver gets VERY hot (regardless of the number of secondary windings). The final PA got warm but early on placed a heat sink on it (it cost too much money).

I would be interested in finding out anyone's thoughts on why I can't squeeze any more power out of this circuit. I don't have a spec sheet on the NTE236; can any more power be expected from this transistor? (The parts store said it was a direct substitute for the MRF476.) The next thing I might do is desolder (again) the PA and measure the output of the driver directly off of the secondary of the matching transformer (the board's really getting worn out in this area so may only do as a last resort).

73 de Art, N00QS @ w0ljf.#neco.co.usa

--

Art Winterbauer N00QS

Internet: awinterb@du.edu OR awinterb@diana.cair.du.edu

Packet: n0oqs @ w0gvt.#neco.co.usa

Date: Tue, 1 Jun 1993 18:37:31 GMT

From: pa.dec.com!nntpd2.cxo.dec.com!nuts2u.enet.dec.com!little@decwrl.dec.com

Subject: Yellow Sheets mail fraud -- contact FBI!

To: info-hams@ucsd.edu

/R=UTRC/R=MRGATE/U=RJA/FFN=RJA/@mrgate.utc.COM writes:

>If you responded to the large boxed ad on page 3 of the 5/1/93
>issue of the Ham Trader Yellow Sheets by Dave Meyers N7KRS,

>via any telephone BBS's advertising radio equipment and computers
>by this individual, or over the air, or if you know of the where-
>abouts of this individual please contact Mr. Dan Marsh of the
>Las Vegas, NV FBI office at (702) 385-1281 as soon as possible and
>provide him with all the details. A large number of people have
>sent this individual money but no one has reported receiving anything
>from him. His telephone service has been disconnected and he is
>no longer at any of his addresses in the Las Vegas area. Please
>also file a mail fraud report with the US Postal Service.

That's very strange. I called this individual a couple of times about a couple of different radios. In both cases, I was told the radios had already been sold. That would be a strange thing to do for someone who is planning on fraud. Why not simply sell the radios many times over and then split town?

73,
Todd
N9MWB

PS Perhaps I got lucky after all?

Date: 1 Jun 93 17:23:49 GMT
From: usc!math.ohio-state.edu!caen!msuinfo!netnews.upenn.edu!mipg.upenn.edu!yee@network.UCSD.EDU
To: info-hams@ucsd.edu

References <C7Myv9.6Av@fc.hp.com>, <1993Jun01.113725.3989@n8emr.cmhnet.org>, <1993Jun1.113123.1@ualr.edu>
Subject : Re: J.C. Whitney 2M HT

>That's why there ought to be a law

Here, I disagree completely. The period in the sentence should be right after the word law.

There are entirely way too many people out there who enact laws for the warm fuzzy feeling that one gets when we feel that we are doing something useful.

Remember the War on Alcohol? Well, somebody got up one morning and said, "There oughta be a law..." What about the War on Drugs? Same thing. In many states, private citizens no longer have the right to defend themselves from criminal intrusion because somebody said, "There oughta be a law..."

People are responsible for their own actions. Laws which restrict MY rights

on the assumption that MY access to something MAY in some way harm somebody should never be enacted.

>Some vendors, notably Radio Shack, do this voluntarily

This should be commended but should not be mandated.

There are way too many ways for the government to come up with revenue generating schemes. Remember civil forfeiture? It was a way to strike at drug kingpins. It has been turned into an underhanded taxation scheme which strikes at those who are not politically connected.

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|------------------------|--|---|
| 411 Blockley Hall | | Conway Yee, N2JWQ |
| 418 Service Drive | | yee@ming.mipg.upenn.edu (preferred) |
| Philadelphia, PA 19104 | | cy5@cunixa.cc.columbia.edu (forwarded to above) |
| (215) 662-6780 | | |

Date: 1 Jun 93 16:09:01 GMT
From: swrinde!cs.utexas.edu!usc!howland.reston.ans.net!newsserver.jvnc.net!
netnews.upenn.edu!prijat!triangle.cs.uofs.edu!bill@network.UCSD.EDU
To: info-hams@ucsd.edu

References <oxenreid.738628325@chaos.cs.umn.edu>,
<1993May29.173130.3929@kd4nc.uucp>, <1993May30.143530.11781@ke4zv.uucp>
Subject : Re: Need for Radar Gun License RE: FCC Softball Fine

In article <1993May30.143530.11781@ke4zv.uucp>, gary@ke4zv.uucp (Gary Coffman) writes:

|>
|> Georgia departments using radar have to follow two sets of rules. One
|> is the FCC rules, and the other is GA law. The current FCC requirement
|> is simply a blanket departmental radar license as noted above. The
|> GA requirements are that a department be certified by the State Patrol,
|> that radar operators have completed the state radar course, that they
|> follow a strict calibration procedure *each* time they set up to take
|> speed readings, that they can't set up within 300 feet of a speed zone
|> change, that they can't issue a ticket for less than 10 MPH over the
|> posted limit, and several other restrictions designed to discourage
|> the operation of speed traps.
|>

I used to travel frequently from Atlanta to UGA (Athens). Based on the average speed I drove and the speed of all the cars passing me, I wouldn't have thought

any police used RADAR in GA.

Except in one little burg I used to drive thru. The name was always good for a laugh too. Between, GA.

"Honey, I got stopped by the State Police for speeding in Between."

"In-between what, dear??"

:-)

I kinda miss my trips to GA now.

bill KB3YV

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| | |
|------------------------|---|
| Bill Gunshannon | "There are no evil thoughts, Mr. Reardon" Francisco |
| bill@cs.uofs.edu | said softly, "except one; the refusal to think." |
| University of Scranton | |
| Scranton, Pennsylvania | #include <std disclaimer.h> |

End of Info-Hams Digest V93 #666
